

The Fiction Is That Reality Exists: A Constructivist Model of Reality, Fiction, and Literature

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## THE FICTION IS THAT REALITY EXISTS\*

A Constructivist Model of Reality, Fiction, and Literature

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### 1. PROSPECTUS

No scientific analysis of the theme "The Structure of Reality in Fiction" can proceed without a basic clarification of the notions "reality" and "fiction." Any discussion of this or related subjects necessarily entails far-reaching ontological, metascientific, and object-theoretical concepts and models (cf. S.J. Schmidt 1976, 1980–1982, 1980a). In this paper I will outline a theoretical frame within which these notions will be explicated, thus avoiding idle metaphysical or metaphorical chat.

This theoretical frame is based on the empirical work of constructivist scientists (e.g., Humberto R. Maturana, Francisco Varela. Ernst von Glasersfeld, Heinz von Foerster, Ruprecht Riedl, and others). Since literary scholars tend not to be familiar with constructivist epistemology and its empirical foundation, I have undertaken the following excursus into biology and physiology in the hope that it will help clarify the differences between constructivist positions and those which have been developed without empirical (scientific) foundations in the history of philosophy (e.g., solipsism). Moreover, a detailed account of constructivist epistemology may help prevent possible misunderstandings of my conception of literature, fiction, and reality. It must be emphasized beforehand, however, that the following discussion does not present completely novel thinking. For instance, certain scientists have at various times maintained that meaning is a matter of convention and subjectivity. But such assumptions, as a rule, lack a consistent theoretical and empirical base, nor has it been made clear what conclusions can (could, should) be drawn from them.

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It is these two deficiencies that I shall try to remedy. Thus, what I claim for my exposition is not novelty or originality but coherence and consequentiality.

## 2. SYSTEMS AND MODELS, CONSTRUCTIONS AND CONVENTIONS

2.1. The constructivist theory of cognition can generally be subsumed under the heading of biological systems theories. But at the same time, constructivist epistemology differs from the dominant structuralism of systems theories in so far as it is primarily oriented toward functional and pragmatic aspects — which does not prevent this theory from having a structural component, as well.

This orientation is reflected in the general hypothesis of the constructivist theory of cognition: living systems are not primarily defined through the qualities of their components, but through their organization, i.e., through relations. In the case of the nervous system, for instance, this means that not the neuron but behavior itself must be regarded as the fundamental unit. According to the constructivist view, people and their behavior can be adequately described and explained in the organismic model. The structure of organisms, i.e., the relations between their elements, is autopoietic. The organization, i.e., the relations which define a living system as a unit and determine its possible interactions and transformations, is homeostatic. Autopoietically structured and homeostatically organized systems with closed nervous systems are auto-referential. Living systems maintain their circular homeostatic organization by reproducing those elements which are dissipated by environmental influences: "It is this circularity of its organization that makes a living system a unit of interactions, and it is this circularity that it must maintain in order to remain a living system and to retain its identity through different interactions" (Maturana 1970:9). According to this kind of circularity all operations in the cognitive domain are inferential. Specifically:

- living systems organizing their experience operate inductively;
- living systems operate predictively, i.e., they presuppose that what has happened once in the experiential domain will happen again;
- living systems possess a conservative organization, i.e., they repeat only what worked or fitted well in the past;
- living systems are historical systems, i.e., the relevance of any behavior is specified from the past.

<sup>1.</sup> There is an interesting parallel here with what is called the boot-strap-hypothesis in microphysics (cf. F. Capra 1975), where the universe is assumed to be a dynamic texture of coherent events. No element and no quality of an element is fundamental. Instead they all emerge from the qualities of all other elements, and the concord of their reciprocal relations determines the structures of the texture.

Living systems are further characterized by their autonomy, identity, and closedness.

They are autonomous insofar as they are unequivocally delimited from their environment. The principal goal of autonomous systems is to maintain their autopoiesis. Organisms maintain a specific identity by trying to keep their organization invariable. (An observer interprets this identity as individuality.)

On account of their closed nervous systems, organisms possess a deterministic structure: their organization defines an ambience that the system can interact with; that is, its niche. The niche is the total cognitive reality of the living system. The nervous system lets the organism interact with its own internal states, enabling it to construct purely physical relations. This mode of interaction leads to self-observation, which is the basis for self-consciousness. In Maturana's opinion, it is an epistemological clou of cognitive biological analyses that the anatomic and functional organization of the nervous system provides a synthesis of behavior but not, for instance, a representation of reality. The cognitive domain of the living system is within the system itself: Organisms interact with their own internal states as if those states were system-independent objects. This kind of abstract thinking requires a nervous system capable of constructing differences between internal and external activities of the living system.

To understand the constructivist concept of behavior, it is necessary to realize first that living systems are permanently affected and deformed by the niche and by the system's own activities. Due to the closedness of the nervous system, any variation in the system's state must lead to further variations, since the nervous system always tries to maintain a constant relation between its receptors and effectors in order to maintain the system's identity. Accordingly, the behavior of living systems can be defined as a functional continuum establishing the unit of the organism in all its interactions and transformations. Maturana compares the behavior of living systems with an instrumental flight: "Behavior is like an instrumental flight in which the effectors (engines, flaps, etc.) vary their state to maintain constant, or to change, the readings of the sensing instruments according to a specified sequence of variations, which either is fixed (specified through evolution) or can be varied during the flight as a result of the state of the flight (learning)" (1970:38).

2.2. By recursively generating representations of its own interactions, a living system becomes an observer. From this state onwards, one has to differentiate between the living system as system and the living system as observer so that confusion about these two fundamentally different domains can be avoided. Maturana describes the difference between these functions as follows: "The niche is defined

by the classes of interactions into which an organism can enter. The environment is defined by the class of interactions into which the observer can enter and which he treats as a context for his interactions with the observed organism. The observer beholds organism and environment simultaneously and he considers as the niche of the organism that part of the environment which he observes to lie in its domain of interactions. [...] Niche and environment, then, intersect only to the extent that the observer (including instruments) and the organism have comparable organizations [...]" (Maturana 1970:11). The system as system thus interacts with and in its niche, which is defined by the possible classes of interactions into which an organism can enter according to the system's structure and organization. This domain, which in the course of evolution has developed into a rather successfully operating structure, is called the ratiomorphous domain by Riedl (1980). The system as observer lives in its environment which represents a domain of cognitive descriptions which Riedl calls the rational domain. As everybody knows, the problem-solving capacity of complex living systems is rather weak and vague on the rational level, whereas in problem-solving the ratiomorphous domain is relatively strong and definite. The difficulty is that problem-solving strategies cannot be transferred from one domain to the other, and as a result the rational domain will never approach the certainty and efficiency of its ratiomorphous counterpart.

2.3. These biological remarks on a constructivist theory of cognition have been indispensable to our discussion insofar as, according to Maturana, cognition "is a biological phenomenon and can only be understood as such; any epistemological insight into the domain of knowledge requires this understanding" (1970:5). The problems of cognition, reality, and truth require answers to the questions: What is there to know? and: How do we know?

So let us now turn to the processes of perception and cognition. Perception, Maturana emphasizes, necessarily reflects the anatomical and functional organization of a nervous system in its interactions, and not the properties of an independent reality. Thus, perception is nothing but a process of construction. It does not (and cannot) reflect an objective reality: "What we experience is a set of outputs of perceptual functions, and we have no way to detect the true nature of the input" (Powers 1976:6). The nervous system can merely inform the organism about the fact that there is a neural signal, but it transmits no information about the origin or quality of the signal. Living systems can only perceive their own sensory signals, which are then interpreted in the system's cognitive domain. These aspects of perception may be reduced to the following formula: Behavior controls perception; perception is interpretation.

Or, as Ernst von Glasersfeld says: "There is no dichotomy between perceiving and interpreting. The act of perceiving is the act of interpreting. The activity of perceiving consists in constructing an invariance. Isolating, selecting, attending are all parts of this process" (von Glasersfeld and Richards 1979:25).

What appears as an object to the living system is the result of an organizationally determined coordination of certain sensomotor signals. Observers cannot talk about "the object itself" or the "object as such"; therefore, only what an observer can and does describe is an object for him. "To describe is to enumerate the actual or potential interactions and relations of the described entity. Accordingly, the observer can describe an entity only if there is at least one other entity from which he can distinguish it and with which he can observe it to interact or relate. This second entity that serves as a reference for the description can be any entity, but the ultimate reference for any description is the observer himself" (Maturana 1970:6f). The cognitive domain of the living system is, then, the domain of all those descriptions which the system is able to produce; i.e., the specific mode of autopoiesis necessarily defines the system's cognitive domain. Because of the circular organization and autoreferentiality of living systems, the cognitive domain is a closed domain of interaction that predetermines all kinds of potential interactions. In general, cognition is dominated by the goal of autopoiesis and its systemic conditions, not by the goal of reproducing "the real world." This is what is meant by the assertion that cognition is restricted to the subject and dependent on the subject.

From the constructivist point of view, cognition cannot be regarded as the perception or description of an independently existing reality, but as an active production of a field of behavior within the system's closed domain of interaction. This view also involves a revision of the common conceptions of learning and memory.

According to Maturana, *learning* can no longer be thought of as an accumulation of representations of reality, but must be regarded as a transformation of behavior through experience. And, in this model, *memory* no longer resembles a storehouse of representations, since there is no such neurophysiological "storing" function. Memory, rather, seems to be a systemic ability to produce behavior in certain situations which an observer may classify as a reenactment of former conduct.

2.4. Beginning with perception, living systems construct models of reality (world-models) and interpret these models as their reality according to the observer-function. The construction of reality, from perception onward, is a mirror of the perceiver's own ontogenesis:

He literally produces the world he lives in by living in it.<sup>2</sup> The construction of world-models necessarily occurs inside living systems. This process is determined by:

- the structure and organization of the system (its biological equipment);
- the system's experience, which is determined by sensory organs and their selectivity;
- the inferences that the system draws from its experience;
- the current state of the process of socialization and its genesis.

The subject-dependency of cognition and the construction of reality must not be equated or confounded with arbitrariness, for the construction of reality operates on the results of biological selection which can be regarded as an evolution within environments. In this history of evolution — as R. Riedl emphasizes — life turns out to be a hypothetical realist who favors appropriate knowledge. Furthermore, the construction of reality affects the social control of problem-solving strategies, corroborating and confirming the sum of historically evolved social experience.

Hence, there is no contradiction between the subject-dependency of knowledge and its successful technical applicability; even their concurrence does not prove the true knowledge of objective reality, since the logic of the described world is isomorphous to the logic of the describing system, i.e., that of the observer. This formulation expresses the essential aspect of constructivist epistemology, "that is to say the constructed world is a world of experiencing which consists of experience and does not assert 'truth' in terms of a correspondence to an ontological reality" (von Glasersfeld 1981:28) — "the world we experience is and must be like it is for we have made it" (p. 29). So far as system and observer are concerned, the constructivist thesis of reality reads as follows: "As observers we can have our real world, as organisms we must remain aware of the fact that it is our construction" (von Glasersfeld and Richards 1979:55).

World-models are thus maps of reality, not reality itself. They document problem-solving which has fitted our purposes. But: "The borders of the world which make our inquiries fail we will never see. What we experience, and what we know, is necessarily built of our own building blocks and can only be explained by our architecture" (von Glasersfeld 1981:35). Even if a cognitive structure works — if problem-solving is successful — we can never draw inferences from this to the constitution of an objective reality; "that is merely to say that we know just one practical way towards a goal which we

<sup>2.</sup> There is an interesting parallel with the formulations of the Indian magician Don Juan in C. Castaneda (1978:225): "I'll tell you what we talk to ourselves about. We talk about our world. In fact we maintain our world with our internal talk. [...] The world is such-and-such or so-and-so only because we tell ourselves that that is the way it is" (p. 226).

have chosen in accordance with certain conditions of our experiential world. [...] Radical constructivism is radical just because it violates convention by developing an epistemology where knowledge no longer concerns 'objective' ontological reality, but exclusively the order and organization of experience in our experiential world. Once for all, the radical constructivist has abjured 'metaphysical realism,' and he totally agrees with Piaget's remark: 'L'intelligence organise le monde en s'organisant elle-même' " (p. 23).

From the theoretical perspective, each living system qua system and observer constructs its own idiosyncratic world-model as a continuum of niche and environment allowing for continuous behavior. Actually, these idiosyncratic world-models are constructed under the dominion of socializing processes, individual cognition being a variant of an ortho-world-model (OWM) which is imposed upon individuals by socializing groups or institutions. The adoption of an OWM is thus enforced by socialization and convention, and as analyses clearly show, any given OWM reflects social interests and power structures. The consensual principles of constructing world-models are mainly established through language, i.e., on the basis of interaction and coordination.

2.5. In the light of constructivist epistemology, any type of realistic ontology and extensional semantics (from commonsense intuition to philosophical realism), as well as all kinds of absolutist claims and attempts at ultimate foundations, has become implausible. This applies not only to knowledge and truth but also, and particularly, to normative and cultural domains.

Cultures, in Maturana's opinion, are both incommensurable and equivalent, since they are always specific types of socially produced world-models and are never mere variant experiences of an objective reality, i.e., variants that could be classified hierarchically according to their approximation to reality. Cultural imperialism is as illegitimate as political imperialism or epistemological truth—terrorism.

Let me mention one final aspect of radical constructivism, i.e., the opinion that "only thinking man himself must be made responsible for his reasoning, knowledge, and so for his action too. Today while behaviorists as much as ever want to hold environment responsible and while sociologists pass the buck to the genes, a theory suggesting that we have only ourselves to thank for the world we live in is rather uncomfortable" (von Glasersfeld 1981:17).

# 3. A CONSTRUCTIVIST LOOK AT LANGUAGE, MEANING, AND COMMUNICATION

3.1. The constructivist theory of cognition has important consequences for any theory of language, meaning, and communication, and thus for any theory of literature which overtly or covertly pre-

supposes and applies these theories. The constructivist theses that meanings are subject-dependent, that language primarily works connotatively, or that communication is not a means of conveying information are provocative enough to attract the attention of scholars of literature. To understand the fundamentals of the constructivist theory of language we must first consider Maturana's distinction between first and second order descriptions.

For an observer, the system's behavior in its niche appears as a description of the niche (first order description, Maturana 1970:40). If a living system,  $S_1$ , communicates with another system,  $S_2$ , then  $S_1$  produces a first order description of its own niche in order to orient  $S_2$ 's behavior toward an intended interaction. For an observer, the behavior of  $S_1$  is a second order description representing whatever the observer believes it to denote. Orienting interactions are therefore communicative descriptions. An observer is a living system which interacts with representations of its communicative descriptions. The self-consciousness of a system as observer originates from orientations toward recursive self-description: "we become self-conscious through self-observation; by making descriptions of ourselves (representations), and if interacting with our descriptions we can describe ourselves describing ourselves, in an endless recursive process" (Maturana 1970:17).

If  $S_1$ 's domain of interaction resembles that of  $S_2$ , then consensual orienting interactions are possible:  $S_1$  orients  $S_2$  toward sets of cooperative interactions that, for both  $S_1$  and  $S_2$ , are relevant. In general, communicative interactions between  $S_1$  and  $S_2$  require that:

- S<sub>1</sub> resembles S<sub>2</sub> as far as biological equipment is concerned;
- $-S_1$  and  $S_2$  share a common domain of interaction (i.e., consensual interaction is a necessary condition for linguistic communication, but not vice versa);
- S<sub>1</sub> and S<sub>2</sub> share a commensurable set of constructional principles and devices for the construction of world-models.

In communicative interaction, S<sub>1</sub> and S<sub>2</sub> produce information or "meanings," by reducing uncertainties, in parallel or simultaneous orienting interactions within their cognitive domains. In other words, language — as I tried to demonstrate elsewhere (cf. Schmidt 1973/21976) — functions as a system of instruction, and not as a system of information conveyance; for S<sub>1</sub> and S<sub>2</sub>, language is connotative — as Maturana also emphasizes. For an observer, however, the language used by S<sub>1</sub> and S<sub>2</sub> appears to be denotative. "[...] When it is recognized that language is connotative and not denotative, and that its function is to orient the orientee within his cognitive domain without regard for the cognitive domain of the orienter, it becomes apparent that there is no transmission of information through language. [...] In a strict sense, then, there is no

transfer of thought from the speaker to his interlocutor; the listener creates information by reducing his uncertainty through his interaction in his cognitive domain. Consensus arises only through cooperative interactions in which the resulting behavior of each organism becomes subservient to the maintenance of both" (Maturana 1970:49).

Maturana also realizes the *symbolic character* of language, which makes the type of orienting independent of the type of orienting interaction. He further emphasizes the closedness of the linguistic domain: living systems cannot overcome this linguistically.

- 3.2. If for participating systems in communicative interaction language is connotative, then the "meaning" of the linguistic means must be subject-dependent: L means α for S<sub>1</sub> in communicative situation CS<sub>1</sub>. If, furthermore, language does not transfer information/"meaning," i.e., if information/"meaning" is constructed within the cognitive domain of the communicating system, then it is necessary to introduce a distinction between the physical phenomenon (TEXT) used for communicating and the cognitive structure (KOMMUNIKAT)<sup>3</sup> assigned to the phenomenon as its meaning for the system. By TEXT (cf. Schmidt 1980, 1982), I mean a physical object that normally socialized speakers of a natural language, Ln, identify as an item of Ln by applying acquired graphematic or acoustic, lexical and syntactic rules of Ln. By KOMMUNIKAT, I mean a cognitive structure that is emotionally charged and evaluated by the system with regard to practical relevance (either implicitly or explicitly). This structure, assigned to the TEXT as its "meaning," is constructed by devices such as:
  - the perceptual construction of  $T_{S_1}$  in Ln
  - applying meaning rules, i.e., the assignment of stereotypic intensions to elements of  $T_{\mathbf{S}_1}$
  - relating intensions to elements of the communicative situation
  - applying inferential rules, i.e., making use of "natural" deductions
  - macro-structuration, i.e., imposing a general thematic structure on the TEXT
  - topicalization
  - applying global patternings like frames, schemas, plans, and scripts, i.e., embedding cognitive items into other cognitive structures available for  $S_1$  which serve as a guide for coherence and as further interpretation
- 3. The German terminology (TEXT/KOMMUNIKAT) cannot be translated into English without losing its constructivist implications. "Surface text" and "communicative text" are acceptable translations (see R. de Beaugrande's translation of Schmidt 1980), but as these terms may be easily confounded with the common conception of text as an objectively given structure, I would prefer to keep the original terminology.

- applying conversational maxims
- applying text and discourse-type recognition devices
- affective loading
- "feeling" or deeming the relevance for S<sub>1</sub> (for details see Schmidt 1982:134ff).<sup>4</sup>

KOMMUNIKATE are fundamentally subject-dependent and idiosyncratic. But even here, as in the case of constructing world-models, the subjective construction of KOMMUNIKATE is conventionalized by practicing construction rules throughout the process of socialization and by imposing social sanctions against individuals who violate these rules. In principle, "meanings" (KOMMUNIKATE) are contextual relations constructed by living systems and dependent on their behavior and experience.

From the constructivist perspective, language appears as a *unit of behavior* and not as a thesaurus of signs (signs are always constructs of linguistic theories). This behavioral unit guarantees a certain continuity of behavior in and between closed systems. The properties of linguistic elements are determined by the properties of all other parts as processes and reciprocations.

- 3.3. The general implications of constructivist theories of cognition and language for an empirically oriented science of literature can now be outlined as follows:
- (i) the constructivist model of language as a behavioral unit provides a nonatomistic, holistic approach; in contrast, language as a sign system proves to be a theoretical construct derived from general linguistics based on realistic ontologies.
- (ii) On the basis of a theory of perception and cognition as constructional processes, the constructivist model of communication is functional and pragmatic in orientation: Linguistic communication is possible only on the basis of consensually cooperating systems within a common domain of interaction; i.e., consensus and cooperation, as much as sympathetic factors (cf. Wegener 1885), common interests, nearness, friendship, and love, are the basis and precondition for successful linguistic communication.
- (iii) KOMMUNIKATE/"meanings" are subject-dependent; the conventionality of rules for constructing KOMMUNIKATE merely guarantees linguistic consensus in normal situations.
- (iv) "TEXT" and "meaning" are no longer ontologized, but are interrelated with the subject and its cognitional operations as well as with the social conventions involved. Conventions<sup>5</sup>

<sup>4.</sup> The above list does not represent the actual course of the psychic process, at best describing some relevant aspects of that process.

<sup>5.</sup> By convention I mean: In a society S, C is a convention of performing an action A in a

determine any nonbiologically conditioned process of human interaction. They are the focus of social interests, implicit norms, and theories of cognition. From a sociological point of view, conventions are regarded as extensions of social institutions in the individual. They also determine, to a large extent, the way in which the system constructs its identity, arranges its experience, and interprets other systems' behavior as consent to or appreciation of its own behavior.

## 4. REALITY AND FICTION

By emphasizing the role of conventions in directing the system's constructional work, we can illustrate how the status of reality, truth, meaning, and identity depends on conventions that determine what kind of rules are individually or socially accepted for the consensual *confirmation* of reality, truth, meaning, and identity.

Examples such as the Greeks' attitude to myth, the controversies over positive and negative identity, health, and illness, over scientific and artistic truth, and so forth show that in the course of history, completely different confirmation procedures or acceptability conventions have been developed for a putatively identical state of affairs (cf. the contributions in P. Watzlawick, ed. 1981). Whether a statement in a certain situation and in the framework of a certain type of discourse will be experienced as real or fictitious does not primarily depend on the linguistic processes of producing and receiving this statement, but on the conventionalized decision whether this statement will be considered acceptable or unacceptable within the framework of the discourse type and in relation to the speaker/hearer's ortho-world-model.

Even the decision to regard TEXTS as literary or nonliterary KOMMUNIKATE does not depend primarily on linguistic mechanisms, but on specific conventions that apply to the social action system LITERATURE and delimit this system from other systems (cf. Schmidt 1980–1982; Hintzenberg et al. 1980). The LITERATUREsystem is the only social action system that allows any loosening of or break with the usual obligation of all statements and actions to the ortho-world-model. Only in the LITERATUREsystem are different world-models compared with the OWM as potentially equivalent models, and here the question of reality is

situation  $\alpha$ , if and only if the members of S mutually impute to each other the knowledge and the expectation that:

<sup>(1)</sup> there is, in S, the precedent of doing A, or a determination, or a shared expectation (an agreement) to do A in  $\alpha$ ;

<sup>(2)</sup> on the basis of (1), almost every number of S expects almost every member of S to do A in  $\alpha$ :

<sup>(3)</sup> on the basis of (2), almost every member of S does A in  $\alpha$ .

subordinate to the questions of specific poetological/aesthetic norms, values, expectations, etc. It is characteristic of the LITERA-TUREsystem that the rules for the construction and evaluation of KOMMUNIKATE are at the participant's disposal to such a degree that he is able to subjectively realize and estimate his own KOMMUNIKATE, and in doing so can exhaust all possible realizations on those cognitive, emotional, and normative levels available to him. In my opinion, these peculiarities of acting in the LITERA-TUREsystem can be explained by assuming two conventions that apply exclusively to this system. In Schmidt 1980–1982, these conventions are introduced and illustrated as the aesthetic convention and the polyvalence convention:

Aesthetic convention: In our society it is expected that all participants who intend to realize aesthetic KOMMUNIKATE from linguistic TEXTS be willing and able:

- (a) to deemphasize the fact convention<sup>6</sup> and to expand their action potential (or the action potential of other participants) beyond the criteria of true/false and useful/useless; instead, they must orient themselves toward aesthetically relevant categories;
- (b) to designate communicative actions intended as literary with appropriate signals during production, or to follow such signals during reception;
- (c) to select as a frame of reference for the referring expressions in the text not just the socially established model of reality, but other frames of reference as well.

Polyvalence convention: It is common knowledge among all participants in aesthetic communicative interaction in our society that:

- (a) text producers are not bound by the monovalence convention;
- (b) text receivers have the freedom to produce different KOMMUNIKATE from the same TEXT in different times and situations, and they expect others to do likewise;
- (c) text receivers rate the realization of aesthetic KOMMUNIKATE as optimal, though the grounds for this rating may differ among participants and situations;
- (d) text mediators and post-processors should not act at variance with the aspects of the polyvalence convention in (a) through (c).

Because of the validity of these two conventions, the LITERA-TUREsystem has always been a domain of social action in which the constructivity of experience and knowledge has been expressed over and over again: from Sterne's *Tristram Shandy* and Molly

- 6. Fact convention: It is common knowledge in our society that communicative objects, especially TEXTS, should be capable of use in referring to the model of reality accepted in that society, so people can decide if the assertions conveyed by the TEXT are true and what their practical relevance is.
- 7. Monovalence convention: It is common knowledge in our society that:
- (a) TEXT producers are expected to shape their TEXTS so that different people at different times can assign them a constant KOMMUNIKAT.
- (b) TEXT receivers are expected to strive for the assignment of a single KOMMUNIKAT to the TEXTS.

Bloom's soliloquy in Joyce's *Ulysses* to John Fowles' *The Magus* (which Ernst von Glasersfeld rates as an exemplary constructivist novel).

## 5. LITERATURE AND FICTION

The following reflections are based on this conception of "literature/ poetry": By LITERATURE, I do not mean a given set of TEXTS, but a social system that consists of activities focusing objects (in the broadest sense) which are rated as "literary objects" by participants (i.e., TEXTS, actions, objects, etc.). This system has an internal structure determined by causal and temporal relations between its elementary roles of producing, mediating, receiving, and postprocessing literary objects. The criteria for delimiting the system of LITERATURE from other systems are provided by the conventions outlined above. The function of the system, which no other system performs, can be explicated as simultaneous activation and integration of subject-oriented cognitive, emotional, and hedonistic processes and states in the assignment of literary KOMMUNIKATE to appropriate TEXTS. If we now accept the hypotheses that the LITERATUREsystem exists as a social system and that it is delimited from other systems by virtue of the conventions I have outlined (cf. the empirical evidence in Hintzenberg et al. 1980), then it becomes clear why there is - at least in the bourgeois system of LITERATURE - such a span from so-called realistic to so-called fantastic "literature," i.e., types of "literature" distinguished according to their "shades of and multiplied through the reading processes of the gamut of reality" readers, from professional to naïve. In fact, the system of LITERATURE seems to be the only place where the construction of world-models as such becomes thematic, and where this thematization can bear upon all positions from ortho-models to remote fantasy worlds. It is obvious that, for the system of LITERA-TURE, the validity of the aesthetic convention may lead to thematization and open linguistic experimentation with the processes of constructing world-models, without any social sanction. In this way, the LITERATURE system has developed its own aesthetic norms and expectations which are, however, historically variable, socially stratified, and secondary to the delimiting conventions referred to above.

The thematization of constructivity in the system of LITERA-TURE may also affect (through cognitive learning processes) the participant's principles and devices of construction in other domains of social action. For instance, the variability of the process of constructing world-models experienced in the system of LITERA-TURE may lead to an understanding of the fundamental variability of all social states of affairs.

As I have tried to show in detail elsewhere (cf. Schmidt 1980),

it is reasonable to set down a discourse-oriented notion of "fictionality" implying a fictionality convention, because decisions concerning the fictionality of statements can only spring from the level of discourse and only with reference to decisions on the relation to the OWM (detailed arguments and illustrations are given in Schmidt 1980). For our present purposes however it should suffice to characterize the relation between fictionality and LITERATURE as follows:

- (i) "Fictional discourses" are not identical with "literary discourses"; they occur independently of "literary discourses" and vice versa;
- (ii) The system of LITERATURE does not only contain "literary works" but sets of TEXT-action-syndromes.

From a historical point of view, we can observe that, apparently due to the validity of the aesthetic convention, participants of the LITERATUREsystem have made good use of fictional discourses. In addition, non-fictive statements may appear in so-called literary texts; indeed, "literary texts" may consist solely of non-fictive statements. It is precisely because of these possibilities that questions of realistic or documentary literature, of truth and probability, of mimesis and poiësis in literature have become topics for discussion. (A literary technique focusing these problems in exemplary fashion, i.e., the quotation, will be examined in section 7.)

In considering fictionality with reference to the system of LITERATURE, it should be noted that operations of fictionality are not, in principle, primarily bound to textual stimuli; rather, these operations are initiated by the specific state of the LITERATURE system, as defined by the conventions outlined above.

## 6. ON CONSTRUCTING REALITY IN FICTION

Let us for the time being adopt the Anglo-Saxon practice of identifying literature with fiction, so that we can say on the strength of what we already concluded: There is no reason why linguistic or stylistic strategies of constructing reality in "fiction" should differ from strategies for constructing reality in "non-fiction." In both cases, these are strategies for constructing KOMMUNIKATE, that is, biologically determined and socially conventionalized strategies. (The effectiveness of the conventions is well known to any author of experimental poetry who renounces conventional techniques of NARRATION and who tries to develop novel devices for constructing KOMMUNIKATE.)

The history of the LITERATUREsystem in our century reveals. that there is no extra-literary text-type, from weather reports to football team rosters, from telephone directories to statistical returns, recipes, and advertising slogans, which has not been poeticized at one time or another, i.e., these and other text-types have

become acceptable components of literary communication. This may apply to any linguistic item too, from graphemic particles or phonetic snatches to letters and isolated words (Lettrism, Concrete Poetry, Visual Poetry, and Conceptual Poetry). The system of LITERATURE appears to be maximally open to all procedures that are cognitively realizable as meaning-constructions through language.

Reality (in the sense of world-models) is always a construct, whether in "fiction" or in "reality." None of these constructs really exists, but some of them fit better than others do, those that fit best are treated as standard elements of the OWM.

"Reality" is always a construction; it is nothing but an ontological evaluation regulated by "reality-degree-index assignment conventions" that, in our society differ from one social action system to the other. As far as the system of LITERATURE is concerned, the aesthetic convention makes all these questions a matter of the participant's discretion, subject to his aesthetic or poetological evaluation. Even if we were to limit "literary works" to "fictive discourses," these discourses would not be unmoored from "reality," i.e., from the socially established OWM. On the contrary, the conventionalized procedures of constructing reality even enter into the production and reception of "fantastic poetry" through the participant's system of preconditions for communicative action, the situation of action, the contemporary state of society. So the socialized mechanisms of meaning-construction in production and reception provide a continuum of semantic action which although covering a broad spectrum of diverse elements, is always related to the socially established conventions, even in the limit-case of total negation.

## 7. QUOTATION IN LITERATURE: A SHORT CASE STUDY

- 7.1. As I have indicated above, the occurrence of quotations in "literary works" can be regarded as a device in which the problems of reality and construction are focused in exemplary fashion. An illustrative instance of the problem of quotation in LITERATURE is Helmut Heißenbüttel's D'Alemberts Ende. An illustration of Marx's observation that books are made of books, this book can also be used to demonstrate the mechanisms for integrating something into the system of LITERATURE which obviously originated in other systems. But let us have a look at the types of quotation in D'Alemberts Ende:
- (i) The book begins with a direct *paraphrase* of a literary source: i.e., with the opening of J.W. von Goethe's *Wahlverwandtschaften*.

## Heißenbüttel:

"Eduard — so nennen wir einen Rundfunkredakteur im besten Mannesalter — Eduard hatte im D-Zug München Hamburg (Ankunft Hauptbahnhof 21.19) die schönsten Stunden eines Julinachmittags (25.7.1968) zugebracht und

betrachtete mit Vergnügen die Gegend zwischen Lüneburg und Harburg. In Hannover zugestiegen, von Kassel kommend, wo sie die internationale Kunstausstellung der 4. Documenta besucht hatte, war eine Kollegin vom Hamburger Fernsehen, die dort Filme über Themen der bildenden Kunst produzierte und die auch für das Ressort, das Eduard verwaltete (Kulturpolitik im Bayrischen Rundfunk), eben etwas über die Documenta schreiben wollte. Ihr Name war Ottilie Wildermuth. Sie saß ihm nun gegenüber, und sie unterhielten sich miteinander.

Da wir denn ungestört hier allein sind, sagte eben Eduard: und ganz ruhigen, heiteren Sinnes, so muß ich Ihnen gestehen, daß ich schon einige Zeit etwas auf dem Herzen habe, was ich Ihnen vertrauen muß und möchte, und nicht dazu kommen kann. Ich habe Ihnen so etwas angemerkt, versetzte Ottilie Wildermuth.

Und ich will nur gestehen, fuhr Eduard fort, wenn mich diese Reise nicht drängte, wenn ich mich nicht bis zur Ankunft entschließen müßte, ich hätte vielleicht weiter geschwiegen.

Was ist es denn? fragte Ottilie freundlich.

Es betrifft unseren Freund, den bekannten ortsansässigen Kunstkritiker, d'Alembert, Leonard, Lonnie, antwortete Eduard: Sie kennen die traurige Lage, in die er, wie so mancher andere, ohne sein Verschulden gesetzt ist."

#### Goethe: "Die Wahlverwandtschaften

Eduard — so nennen wir einen reichen Baron im besten Mannesalter — Eduard hatte in seiner Baumschule die schönste Stunde eines Aprilnachmittags zugebracht, um frisch erhaltenen Pfropfreiser auf junge Stämme zu bringen. Sein Geschäft war eben vollendet; er legte die Gerätschaften in das Futteral zusammen und betrachtete seine Arbeit mit Vergnügen, als der Gärtner hinzutrat und sich an dem teilnehmenden Fleiße des Herrn ergetzte. [...]

"Da wir denn ungestört hier allein sind", sagte Eduard, "und ganz ruhigen, heiteren Sinnes, so muß ich dir gestehen, daß ich schon einige Zeit etwas auf dem Herzen habe, was ich dir vertrauen muß und möchte, und nicht dazu kommen kann."

"Ich habe dir so etwas angemerkt," versetzte Charlotte.

"Und ich will nur gestehen," fuhr Eduard fort, "wenn mich der Postbote morgen früh nicht drängte, wenn wir uns nicht heut entschließen müßten, ich hätte vielleicht noch länger geschwiegern."

"Was ist es denn?" fragte Charlotte freundlich entgegenkommend.

"Es betrifft unsern Freund, den Hauptmann," antwortete Eduard. "Du kennst die traurige Lage, in die er, wie so mancher andere, ohne sein Verschulden gesetzt ist."

- (ii) A second procedure related to the history of the LITERA-TUREsystem consists of *allusions*, easily decipherable for the connoisseur. For instance, there are several headings in *D'Alemberts Ende* which allude to well-known literary models more or less directly:
  - "Portrait des jungen Künstlers als junger Künstler" (Portrait of the Young Artist as a Young Artist) to Joyce's "A Portrait of the Artist as a Young Man";
  - "Allmähliche Verfertigung einer Persönlichkeit" (The Gradual Making of a Personality) to Kleist's "Über die allmähliche Verfertigung der Gedanken beim Reden";

- "Nachmittag eines Kapauns" (Afternoon of a Capon) to Mallarmé's "L'après-midi d'un faun";
- "D'Alemberts Träume" (D'Alembert's Dreams) to Diderot's "Le rêve de D'Allembert"; etc.
- (iii) A third procedure could be called *direct reality* quotation. Heißenbüttel uses this type of quotation in a variety of ways; e.g., as a summary of the news communicated to the German public on a particular day:

"Von dem 25 jährigen britischen Seemann James McC. wurde auf der Reeperbahn eine 64 Jahre alte Raumpflegerin niedergeschlagen. Wagnerfestspiele in Bayreuth eröffnet. Bundesaußenminister Willy Brandt von Autogrammjägern umlagert. Biafra wartet auf die ersten Hilfssendungen. Dahrendorf kündigt präzises Programm seiner Partei an. Dem Ruhrgebiet droht Überalterung. Die Kulturrevolution in China ist zersplittert. Eberhard Müller: Den Mut haben, heiße Eisen anzufassen. Das alles ist an einem einzigen Tag passiert oder wurde an diesem Tag der Öffentlichkeit mitgeteilt" (p. 114).

or, as an enumeration of events in a certain domain of action, e.g.:

"Schiffsankünfte in Hamburg: Du. Neder Lek, 50 B, K. W. — Hafen, Poot u. K., Stgt.-Dt. Ardea, Viehbrücke, Vieh. — No. Jolita, 25, Norw. Schiffs. Agt., Papier.-Br. Pando Cape, 69 B, Mare Schiff Ktr. leer. — Du. Lely, Hansamatex 1, Stahl, Fett. — Dt. Dreestrom, Oberelbe Pohl u. Co., Schulte u. Br., Papier. — Dt. Warturm, Oderhöft, Überseebrücke, Hansa-Linie, Ausrüstung. — It. Edera, Harburg 2, Oltmann, Erz.-Dt. Westen Till, Nordd. Lloyd, Stgt. — No. Beau Geste, Shell Katwyk, Gellatly Rohöl. — Br. Plainsman, 70 A/B, Sanne, leer. — Li. Ocean Regina, Norderelbe, Ott, Kopra. — Da. Dragoer Maersk, 34 B, Infruta, Frucht" (p. 115).

(iv) In a fourth procedure, Heißenbüttel makes his figures quote slogans, opinions, and theories which, at the time the book was written, were being discussed by West Germany's intelligentsia. Starting from what was then a topical Marcusian thesis on obscenity, it is said, e.g.:

"Auch Eduard findet wie Frau d'Alembert nicht das Bild einer nackten Frau, die ihre Schamhaare entblößt, obszön, sondern das eines Generals, der seine Orden zur Schau stellt. Bertolt Wildermuth will wie Frau d'Alembert durch Striptease zur Menschlichkeit zurückbringen.

Auch Dr. Johnson hat gehört, daß die Studenten die Arbeiter, damit sie ein besseres proletarisches Klassenbewußtsein. Frau d'Alembert empfiehlt wie Andie Wildermuth intermediale Duschen zur Erweiterung des Sensoriums.

Dr. Johnson besteht nun wie Helmut Maria Wildermuth darauf, daß die totale Ablehnung undenkbar ist ohne die unwiderstehliche Offenbarung der Scham, die sich in der Unschuld des Verlangens, der schöpferischen Heiterkeit behauptet" (p. 228).

"Frau d'Alembert wiederum erwägt, ob die gegenwärtige Perfektionierung der direkten ökonomischen Ausbeutung nicht dem bedingungslosen Konsum entspricht, der die innere Logik seines überentwickelten Systems durch die Passivität unserer Gesellschaft vollendet.

Dr. Johnson hält das Konzept für im wesentlichen tradeunionistisch.

Wie Frau d'Alembert versteht auch Helmut Maria Wildermuth die studenti-

sche Protestbewegung als eine egalitäte Bewegung, die mit der Forderung, unter bestehenden Herrschaftsverhältnissen das Ungleichheitsbewußtsein der Menschen zu stärken, nur die praktische Überwindung aller Formen der illusionären Gleichheit bezweckt.

Eduard stimmt Andie Wildermuth darin zu, daß die Stärke der Bewegung vielleicht darin liegt, daß sie sich auf unkontrollierbare Spontaneität stützt, daß sie Impulse gibt, ohne [...]" (p. 229).

(v) Finally, the process of quoting is reduced to its pure mechanics: the bare statement that a figure is quoting somebody whose name, for the connoisseur, already represents his theoretical program:

"Andie Wildermuth antwortet mit einem Zitat von Herbet Marcuse.

D'Alembert zitiert Jürgen Habermas.

Frau d'Alembert zitiert Louis Althusser.

Die Schildkröte zitiert Herbert Marcuse.

Wie Frau d'Alembert und die Brüder Andie und Bertolt Wildermuth fragt nun auch Eduard, wie es aber möglich ist, daß Studenten, die ja zumindest im ökonomischen Sinne keine Klasse darstellen, zur Vorhut des revolutionären Kampfes werden konnten.

Andie Wildermuth hat gehört, daß die Studenten und die Arbeiter, damit nicht nur die Arbeiter, sondern auch die Studenten ein besseres proletarisches Klassenbewußtsein.

Helmut Maria Wildermuth zitiert noch einmal Charles Fourier.

Dr. Johnson zitiert Kropotkin.

Frau d'Alembert zitiert Wilhelm Reich.

Dr. Johnson fragt plötzlich entgegen seiner früheren Zustimmung und nach einigem Nachdenken, ob Studenten tatsächlich weit weniger einem Rollenzwang unterliegen als die, die in festen Lebens- und Arbeitsverhältnissen stehen, das heißt, ob sie tatsächlich individuell ansprechbar sind, spontaner reagieren als andere Bevölkerungsgruppen und eher bereit sind, die Notwendigkeit umfassender Veränderungen der Gesellschaft anzuerkennen.

Helmut Maria Wildermuth zitiert Herbert Marcuse.

Dr. Johnson besteht noch einmal darauf, daß die totale Ablehnung undenkbar ist ohne die unwiderstehliche Offenbarung der Scham, die sich in der Unschuld des Verlangens, der schöpferischen Heiterkeit behauptet" (p. 237).

7.2. That Heißenbüttel is aware of using these techniques of quoting is clearly illustrated by the motto of his book:

Das Zitat als solches hat etwas spezifisch Musikalisches, ungeachtet des Mechanischen, das ihm eignet, außerdem aber ist es Wirklichkeit, die sich in Fiktion verwandelt, Fiktion, die das Wirkliche absorbiert, eine eigentümlich träumerische und reizvolle Vermischung der Sphären.
Thomas Mann.

[The quotation as such is something specifically musical, notwithstanding the mechanics peculiar to it, but it is also reality, transforming itself into fiction, fiction that absorbs reality, a peculiarly amusing and charming mixture of spheres.] (Trans. H. Hauptmeier)

Within the framework of an Empirical Theory of LITERATURE (cf. Schmidt 1980-1982) it remains to ask:

- (1) What occurs in the transition of pre-formulated textual material from other domains of social action to the system of LITERATURE?
- (2) What occurs if in the system of LITERATURE pre-formulated textual material from other domains of the LITERATURE-system reappear in new TEXTS?

Quotations, if they are recognized by participants in literary communication, could (must?) be related to two frames of reference at the same time: to the domain of their original occurrence and to the domain of their present occurrence. Consequently, there are two possibilities: the initial domain can be a literary context or a nonliterary context; the present domain of occurrence can be a literary or non-literary context. Among these, all combinations are possible. In any case, the receiver has to decide which aesthetic-stylistic function he shall assign to a particular integration of domains. For our discussion, the case of quoting non-literary items in literary contexts is particularly interesting, since in that case we have to inquire not only about functions but also about the truth-mechanism actuated by the reader. In general, we can assume that insofar as the receiver acts in accordance with the aesthetic convention, he subordinates the (referential) semantic question about truth-orfalsity-in-OWM to the question of aesthetic assessability of the quotation and the quotation-operation as a stylistic device. In the light of the poetic norms underlying this process, we can observe the following:

- (i) If a quotation from a non-literary context occurs in a TEXT which is received in accordance with the rules of a so-called realistic poetics, then it makes some difference whether the quotation is OWM-correct. Violations of this type of correctness are rejected as poetically inadequate, since OWM-compatibility and OWM-adequacy are regarded as aesthetic values in realistic poetics (cf. Schmidt 1980).
- (ii) If a quotation from a non-literary context occurs in a TEXT which is received in accordance with the rules of a non-realistic poetics, then OWM-correctness is not of much importance, since other aesthetic values dominate (e.g., in surrealistic poetics).
- (iii) In both cases, however, the receiver has to decide during or after his reading whether he will regard quotations from non-literary contexts as components of a literary object in the system of LITERATURE, necessarily subjecting these quotations to the aesthetic convention, or whether he finds them to be alien elements from other action systems and thus treats them in accordance with the reception conventions of those systems. According to the Empirical Theory of LITERATURE,

it is only the receiver in the first instance who processes a quotation from a non-literary context as LITERATUREsystem-adequate. From a theoretical point of view, there is no exception to the aesthetic convention as the criterion for delimiting the system of LITERATURE. As its function is to dominate (not eliminate) the fact convention, the receiver can realize and experience the original context of the quotation and its transformation upon its entrance into the system of LITERATURE.

When quotations from non-literary contexts have particular relevance to the experience of the receiver, these quotations will retain their double contextualizability in literary contexts. too (a kind of Gestalt-Switch). In such cases the constructive decision, usually implicit, can actually be felt<sup>8</sup>: the decision whether or not to suspend the semantic norms of true and false, which apply everywhere except within the system of LITERATURE. But this decision may also make the receiver realize the constructional nature of the true-false-system, particularly through the receiver's processing of non-literary quotations, as a consequence, the rules of our inner soliloquy, as well as the rules of our communication, could be changed.

Molly Bloom's soliloquy (of about 40,000 words) in the final chapter of James Joyce's Ulysses is a typical example of such an inner soliloguy. As Auguste Bailly long ago observed in his review article for the journal Candide: "Joyce recognized . . . that our mental life is an incessant inner monologue." However, Bailly could not have known then that this inner monologue is more than an incessant stream of consciousness: that it is rather the central cognitive mechanism by which we keep constructing and changing our world-models. Castaneda's Don Juan goes much further: he realizes that we actually construct and maintain the world through our constant inner monologue (see note 2, above). In the light of this constructivist model, Molly Bloom's soliloguy appears to be a masterpiece of constructivist literature, not merely an illustration of daydream-work. Molly, in her inner monologue, constructs the world, her biography, and her identity by combining an immense wealth of impressions and experiences and cognitively structuring these data so that they become identifiable as phases of her biography and her identity. However, since she follows a rather private "logic," the reader is confronted with the problem of detecting those "frames" which can supply him with the most coherent organization of the items and which provide a meaningful distribution of their emotive charge.

<sup>8.</sup> An important example from the fine arts is Jasper Johns's paintings of the American flag which calls insistently for a decision: Is it a flag or is it a painting?

If Molly Bloom had been a philosopher, she too might have invented the title of my paper: I live my world. I tell myself my world. The fiction is that reality exists!

### 8. CONSTRUCTIVITY

Let me recapitulate the results of my argument in the following theses:

- (a) Whatever we (as observers) call *reality* is a construct in the cognitive domain of autopoietic systems. This construct is determined by the biological equipment of the system and by the process of socialization in which the conventions and criteria for constructing and evaluating reality are internalized.
- (b) What we (as observers) call meaning is a construct in the cognitive domain of autopoietic systems. Meanings are not transmitted by communication. Meaning is constructed by the subject on the basis of interactions with other subjects, and of socially acquired linguistic conventions and stereotypes.
- (c) In the system of LITERATURE, models of reality are worked out in linguistic constructions. Here participants make use of all linguistic devices, no matter where these devices have been developed, whether in the system of LITERATURE itself or in other social action systems. Literary constructions are regulated by conventions, and are evaluated in accordance with the prevalent system of poetic norms. Under the aesthetic convention, all constructional processes in the system of LITERATURE are relieved of any obligation to the OWM; the constructivity of reality-designs thus necessarily becomes thematic, as our case study clearly illustrates.
- (d) What literary or non-literary fiction or reality is depends on conventionalized criteria within systems of social action, and not on reality as such or art as such. In other words, it is the system of LITERATURE as a behavioral unit that decides on literariness and fiction in literary contexts; literary works and their properties are defined by the system of LITERATURE, not vice versa.

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